ORIGINAL

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FIELD NOTES

OF THE DEPENDENT RESURVEY OF

A PORTION OF THE EAST BOUNDARY

TOWNSHIP 5 SOUTH, RANGE 22 WEST,

AND

PORTIONS OF METES-AND-BOUNDS SURVEYS IN

TOWNSHIP 5 SOUTH, RANGES 21 AND 22 WEST,

OF THE GILA AND SALT RIVER MERIDIAN,

IN THE STATE OF ARIZONA.

EXECUTED BY

Craig S. Dukart, Cadastral Surveyor

Under Special Instructions dated June 29, 2017, approved June 29, 2017, which provided for the surveys included under Group No. 1175, and assignment instructions dated June 29, 2017.

Survey commenced July 20, 2017

Survey completed August 9, 2017

INDEX DIAGRAM

TOWNSHIP 5 SOUTH RANGE 22 WEST-GILA & SALT RIVER MERIDIAN, ARIZONA

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Dependent Resurvey of portions of Various Parcels..... Pages 5-14

T. 5 S., Rs. 21 and 22 W., Gila and Salt River Meridian, Arizona

FEET

The following field notes describe the Dependent Resurvey of a portion of the East Boundary, Township 5 South, Range 22 West, and portions of Metes-and-Bounds surveys in Township 5 South, Ranges 21 and 22 West, Gila and Salt River Meridian, Arizona.

The history of surveys pertaining to this survey is as follows:

The survey of a portion of the West Boundary, Township 5 South, Range 21 West, Gila and Salt River Meridian, was surveyed by Milton Santee, U.S. Deputy Surveyor, in 1881. (Book 1640)

The resurvey of the East Boundary and part of the North Boundary, the survey of part of the North Boundary and Subdivision Lines, and meanders of the left bank of the Colorado River, within Fractional Township 5 South, Range 22 West, Gila and Salt River Meridian, were surveyed by William B. Kimmel, U.S. Surveyor, in 1915. (Book 3172)

The survey of lots 5, 6, 7, 8, 10, 11, 12, 13, 14, at Martinez Lake for Miro-Kinley, Et Al., Township 5 South, Ranges 21 and 22 West, Gila and Salt River Meridian, were surveyed by Donald R. Norman, Arizona R.L.S. 22772, in 1991, for Don Peterson Engineers, Inc., an unrecorded survey. A plat of the unrecorded survey was obtained from Don Peterson, R.L.S. 16592, DPE Construction, Inc.

The plat labeled "SPINALI LOT SURVEY AND SPLIT", was surveyed by Timothy V. Eisenmann, Arizona R.L.S. 16810, dated June 2003, Book 3 of Surveys, Page 82, filed at the Yuma County Recorder's Office, dated August 21, 2003.

The plat labeled "McMILLIN LAKE HOUSE LAND DIVISION (LDP 11-08)", was surveyed by Kevin A. Dahl, Arizona R.L.S. 31018, Book 11, Page 40, filed at the Yuma County Recorder's Office, dated February 1, 2012.

The plat labeled "MALONE/WOLFE LAND DIVISION (LDP 13-08)", was surveyed by James V. Davey, Arizona R.L.S. 30348, Book 13, Page 33, filed at the Yuma County Recorder's Office, dated July 10, 2014.

The survey was executed in accordance with the specifications as set forth in the $\underline{\text{Manual of Surveying Instructions, (2009)}}$, and the Special Instructions dated June 29, 2017, for Group No. 1175, Arizona.

The true meridian direction and length of all lines were determined by real-time kinematic global positioning system observations using Trimble Navigation R8-4 model receivers.

The "standard rebar" referred to in these notes is a rebar, 24 ins. long, 5/8 in. diam., with a brass cap, 2 ins. diam.

T. 5 S., Rs. 21 and 22 W., Gila and Salt River Meridian, Arizona

FEET

Geodetic control was derived from Global Positioning System (GPS) static post observations processed by National Geodetic Survey, Online Positioning User Service (OPUS), using Continuously Operating Reference Stations (CORS) DL1884 AZYU CITY OF YUMA CORS ARP, DI2239 P003 MOHAWKVALLAZ2006 CORS ARP and DG8519 AZBK MCDOT BUCKEYE CORS ARP.

The NAD 83 (CORS96) (EPOCH:2010), the geographic position of the 1/4 sec. cor. of secs. 13 and 18, T. 5 S., RS. 21 and 22 W., is as follows:

Latitude: 32°59'29.844" N. Longitude: 114°28'25.959" W.

The NAD 83 (CORS96)(EPOCH:2010), the geographic position of the sec. cor. of secs. 17, 18, 19, and 20, T. 5 S., R. 21 W., is as follows:

Latitude: 32°59'03.777" N. Longitude: 114°27'24.625" W.

The mean magnetic declination is 11° E.

Dependent Resurvey of a portion of the East Boundary T. 5 S., R. 22 W., Gila and Salt River Meridian, Arizona

Restoring the resurvey executed by William B. Kimmel, 1915

Beginning at the cor. of secs. 7, 12, 13, and 18, monumented with a stone, 5×10 ins., projecting 10 ins. above the ground, mkd. with 4 grooves on the S. face and 2 grooves on the N. face, in the center of a circle of stone, with a T-Post nearby.

S. 0°20' E., bet. Secs. 13 and 18. (Record Bearing: S. 0°18' E.)

Over rolling terrain.

2,636.45

The 1/4 sec. cor. of secs. 13 and 18, monumented with an iron post, 1 in. diam., firmly set, projecting 10 ins. above the ground, with a U.S. DEPT. OF THE INTERIOR BUR. OF SPORT FISHERIES AND WILDLIFE brass cap, 3 ins. diam., mkd. 1/4 SEC 13 SEC 18 1968. No records of this corner were located, and no search was made for the original accessories.

Add the marks 2017 to the brass cap.

From this point, the sec. cor. of secs. 17, 18, 19 and 20, monumented with an iron post, 2 ins. diam., firmly set, projecting 15, with brass cap mkd. T5S R21W S18 S17 S19 S20 1934, with the 3 stamped upside down, bears S. 63°14′ E., 5,851.11 ft. dist.

Dependent Resurvey of a Portion of the East Boundary T. 5 S., Rs. 21 and 22 W., Gila and Salt River Meridian, Arizona

FEET

From this same point, the Point Of Beginning of Lot 9, monumented with a rebar, 1 in. diam., firmly set, projecting 2 ins. above the ground, bears S. 14°15′ E., 1,427.04 ft. dist.

From this same point, the Point Of Beginning of Martinez Lake Recreation Area (MLRA) Cooperative Agreement Boundary, identical with Angle Point No. 1, sec. 18, on the bank of Martinez Lake, bears S. 5°48′ E., 1,526.05 ft. dist., hereinafter described.

S. 0°02' E., beginning new measurement. (Record Bearing: South)

1,071.00

Intersect the southerly right-of-way of Mallard Road, identical with MLRA Cooperative Agreement Boundary, designated as Angle Point No. 9, sec. 18, identical with Angle Point No. 1, sec. 13, not monumented.

From this point, Angle Point No. 8, sec. 18, hereinafter described, bears S. 34°04′ E., 103.35 ft.

From this same point, Angle Point No. 2, sec. 13, hereinafter described, bears N. 34°04′ W., 1.80 ft.

1,584.50

Intersect the water line of Martinez Lake, not monumented.

Dependent Resurvey of portions of Various Parcels
T. 5 S., Rs. 21 and 22 W., Gila and Salt River Meridian, Arizona

Restoring the surveys executed by Various Arizona Registered Land Surveyors

NOTE - The unrecorded plat SURVEY OF LOTS 5, 6, 7, 8, 10, 11, 12, 13, 14, at MARTINEZ LAKE FOR MIRO-KINLEY ET AL., 1991, has bearings and distances for Lot 10 that match the 1999 Grant Deed (Fee #: 1999-07437). Patent No. 53-99283-01 (1992) has a different legal description for a parcel of land in the same area as Lot 10. Patent No. 53-99283-01 was used to calculate the Grant Boundary positions for missing angle points.

From the point for Angle Point No. 1, sec. 18, on the bank of Martinez Lake, not monumented. Latitude: 32°59'14.823" N. Longitude: 114°28'24.150" W., NAD 83 (CORS96) (EPOCH:2010).

N. $7^{\circ}23'$ W., on line 1-2.

13.58

Point selected for a witness point.

Drive a standard rebar, flush with the ground, mkd.

Dependent Resurvey of Portions of Various Parcels T. 5 S., Rs. 21 and 22 W., Gila and Salt River Meridian, Arizona

T 5 S R 21 W S 18

Set a steel "U-Post" fence post nearby.

Point for Angle Point No. 2, sec. 18, at proportionate dist., by Grant Boundary method, there is no remaining evidence of a monument.

Drive a standard rebar, flush with the ground, mkd.

Set a steel "U-Post" fence post nearby.

From this point, the most southerly cor. of Lot 9A identical with a corner of Lot 10, monumented with a rebar, 1/2 in. diam., firmly set flush with the ground, with plastic cap mkd. LS 22767, bears S. 24°32′ E., 109.7 ft. dist., reestablished by Kevin A. Dahl, Arizona R.L.S. No. 31018 according to plat filed in Book 11, Page 40, at the Yuma County Recorder's Office, dated February 1, 2012. This point was used to calculate grant boundary positions for missing angle points.

S. 88°13' W., on line 2 - 3.

25.84

Point for Angle Point No. 3, sec. 18, at proportionate dist., by Grant Boundary method, there is no remaining evidence of a monument.

Drive a standard rebar, flush with the ground, mkd.

Set a steel "U-Post" fence post nearby.

Dependent Resurvey of Portions of Various Parcels

T. 5 S., Rs. 21 and 22 W., Gila and Salt River Meridian, Arizona FEET N. $71^{\circ}05'$ W., on line 3 - 4. 40.05 Point for Angle Point No. 4, sec. 18, at proportionate dist., by Grant Boundary method, there is no remaining evidence of a monument. Drive a standard rebar, flush with the ground, mkd. T 5 S R 21 W S 18 AP4 2017 Set a steel "U-Post" fence post nearby. N. 22°09' E., on line 4 - 5. 46.20 A cor. of Lot 10, Martinez Lake, marked with a "T-Post" fence post, set by persons unknown. This "T-Post" is at record distance from the NW cor. of Lot 10 and is accepted as the best available evidence of the true cor. position. This cor. is now designated as, Angle Point No. 5, sec. 18. At the cor. position. Drive a standard rebar, flush with the ground, mkd. T 5 S R 21 W S 18 2017 Set a steel "U-Post" fence post nearby. From this point, a rebar, 1/2 in. diam., firmly set, projecting 3 ins. above ground, bears N. 73°22' W., 78.9 ft. dist., set by persons unknown and shown on an unrecorded plat titled SUBDIVISIONS OF SECTION 19, T.5S. R.21W. MARTINEZ LAKE IMPERIAL REFUGE, Surveyed October 1963, with a tie of 125.1 ft. to

"YARD".

Dependent Resurvey of Portions of Various Parcels T. 5 S., Rs. 21 and 22 W., Gila and Salt River Meridian, Arizona

FEET

N. $34^{\circ}40'$ E., on line 5 - 6.

166.91

The NW cor. of Lot 10, Martinez Lake, on the S. right-of-way of Mallard Road, established by Donald R. Norman, Arizona R.L.S. No. 22772, according to an unrecorded plat obtained from the office of Donald R. Peterson, Arizona R.L.S. No. 16592, located in Yuma, Arizona, monumented with a rebar, 5/8 in. diam., firmly set, flush with the ground, with plastic cap mkd. LS 16592. This cor. is now designated as Angle Point No. 6, sec. 18.

Attach a brass washer mkd. BLM 2017.

From this point, the point of beginning of Lot 9A, hereinbefore described, bears S. 55°28′ E., 188.27 ft. dist.

From this same point, a U.S. FISH AND WILDLIFE SERVICE monument, an iron pipe, 1 in. diam., firmly set, projecting 3 ins. above the ground, with a brass cap, 3 ins. diam., mkd. YARD, bears S. 81°51′ W., 97.40 ft. dist.

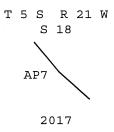
NOTE - The rights-of-way of the graded roads were determined by the apparent centerline of the constructed road, with a 15 ft. offset on the appropriate side. The bearings differ from those shown on the Quit Claim Deed, Book 1816, Pages 566 and 569, but the distances were held where possible.

N. $54^{\circ}17'$ W., on line 6 - 7, along the southwesterly right-ofway of Mallard Road.

82.42

Point for Angle Point No. 7, sec. 18.

Drive a standard rebar, flush with the ground, mkd.



N. $44^{\circ}40^{\circ}$ W., on line 7 - 8, along the southwesterly right-ofway of Mallard road.

100.79

Point for Angle Point No. 8, sec. 18.

Drive a standard rebar, flush with the ground, mkd.

Dependent Resurvey of Portions of Various Parcels T. 5 S., Rs. 21 and 22 W., Gila and Salt River Meridian, Arizona

FEET T 5 S R 21 W S 18 AP8 2017 N. $34^{\circ}04'$ W., on line 8 - 9, along the southwesterly right-ofway of Mallard Road. 103.34 Point for Angle Point No. 9, sec. 18, identical with Angle Point No. 1, sec. 13, at the intersection with the township line, hereinbefore described. Continue along the southwesterly right-of-way of Mallard Road, in sec. 13, Township 5 South, Range 22 West. 105.17 Point for Angle Point No. 2, sec. 13. Drive a standard rebar, flush with the ground, mkd. T 5 S R 22 W S 13 AP2 2017 N. 24°19' W., on line 2 - 3, along the southwesterly right-ofway of Mallard Road. 143.11 Point for Angle Point No. 3, sec. 13, at the intersection with the southeasterly right-of-way of Eagle Road (also known as Egret Road). Drive a standard rebar, flush with the ground, mkd. T 5 S R 22 W S 13 AP3 2017

Dependent Resurvey of Portions of Various Parcels T. 5 S., Rs. 21 and 22 W., Gila and Salt River Meridian, Arizona

FEET

From this point, a corner of Parcel 11A-1, monumented with a rebar, 1/2 in. diam., firmly set, flush with the ground, with plastic cap mkd. LS 16810, bears N. 12°26' W., 78.9 ft. dist., reestablished by Timothy V. Eisenmann, Arizona R.L.S. No. 16810 according to plat filed in Book 3 of Surveys, Page 82, at the Yuma County Recorder's Office, dated August 21, 2003.

S. 13°49' W., on line 3 - 4, along the southeasterly right-of-way of Eagle Road.

67.96

Point for Angle Point No. 4, sec. 13.

Drive a standard rebar, flush with the ground, mkd.

T 5 S R 22 W

From this point, a corner of Parcel 11 identical with a corner of Parcel 11A-1, monumented with a rebar, 5/8 in., firmly set, flush with the ground, with plastic cap mkd. LS 16592, bears N. 64°00' W., 35.2 ft. dist., established by Donald R. Norman, Arizona R.L.S. No. 22772, according to an unrecorded plat obtained from Don Peterson, Arizona R.L.S. No. 16592.

2017

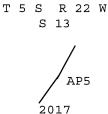
From this same point, a rebar, 1/2 in. diam., firmly set, projecting 1 in. above the ground, with a plastic cap, not legible, smashed down the rebar, bears N. $73^{\circ}17'$ E., 6.3 ft. dist., set by persons unknown.

S. 13°45' W., on line 4 - 5, along the southeasterly right-of-way of Eagle Road.

76.89

Point for Angle Point No. 5, sec. 13.

Drive a standard rebar, flush with the ground, mkd.



Dependent Resurvey of Portions of Various Parcels

T. 5 S., Rs. 21 and 22 W., Gila and Salt River Meridian, Arizona FEET S. 18°55' W., on line 5 - 6, along the southeasterly right-ofway of Eagle Road. 124.74 Point for Angle Point No. 6, sec. 13. Drive a standard rebar, flush with the ground, mkd. T 5 S R 22 W S 13 2017 From this point, a steel pin, 1/16 in. diam., firmly set, 4 ins. below ground, bears S. 28°36' W., 23.7 ft. dist., set by persons unknown and shown on an unrecorded plat titled SUBDIVISIONS OF SECTION 19, T.5S. R.21W. MARTINEZ LAKE IMPERIAL REFUGE, Surveyed October 1963, with a tie of 243.2 ft. to "YARD". S. 16°08' W., on line 6 - 7, along the southeasterly right-ofway of Eagle Road. 75.36 Point for Angle Point No. 7, sec. 13. Drive a standard rebar, flush with the ground, mkd. T 5 S R 22 W S 13 2017 S. 9°17' W., on line 7 - 8, along the southeasterly right-of-way of Eagle Road. 69.69 Point for Angle Point No. 8, sec. 13. Drive a standard rebar, flush with the ground, mkd.

Dependent Resurvey of Portions of Various Parcels T. 5 S., Rs. 21 and 22 W., Gila and Salt River Meridian, Arizona

FEET T 5 S R 22 W S 13 2017 S. 3°23' W., on line 8 - 9, along the southeasterly right-of-way of Eagle Road. 68.98 Point for Angle Point No. 9, sec. 13. Drive a standard rebar, flush with the ground, mkd. T 5 S R 22 W S 13 AP9 2017 S. 1°33' W., on line 9 - 10, along the southeasterly right-ofway of Eagle Road. 181.55 Point for Angle Point No. 10, sec. 13. Drive a standard rebar, flush with the ground, mkd. T 5 S R 22 W S 13 2017 From this point, a rebar, 1/2 in. diam., firmly set, projecting 1 in. above the ground, with plastic cap mkd. LS 16592, bears N. 82°46' W., 30.0 ft. dist., established by Donald R. Norman, Arizona R.L.S. No. 22772, according to an unrecorded plat

obtained from Don Peterson, Arizona R.L.S. No. 16592.

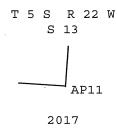
Dependent Resurvey of Portions of Various Parcels

T. 5 S., Rs. 21 and 22 W., Gila and Salt River Meridian, Arizona FEET

way of Eagle Road. Point for Angle Point No. 11, sec. 13.

63.49

Drive a standard rebar, flush with the ground, mkd.



S. 9°55' W., on line 10 - 11, along the southeasterly right-of-

N. 80°04' W., on line 11 - 12, across Eagle Road.

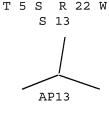
42.17 The SE cor. of Lot 11, Martinez Lake, reestablished by James V. Davey, Arizona R.L.S. No. 30348, in 2014, according to the plat filed in Book 13, Page 33, at the Yuma County Recorder's office, dated July 10, 2014, monumented with a rebar, 5/8 in. diam., firmly set, flush with the ground, with plastic cap mkd. DAVEY LS30348. This point is now designated as Angle Point No. 12, sec. 13

Attach a brass washer mkd. BLM 2017.

N. $58^{\circ}55'$ W., on line 12 - 13.

243.50 Point for the SW cor. of Lot 11, identical with the SE cor. of Lot 11A, Martinez Lake, and now designated as Angle Point No. 13, sec. 13, at proportionate distance, determined by the distance-distance method, there is no remaining evidence of the Latitude: 32°59'14.818" N. Longitude: 114°28'31.082" corner. W., NAD 83 (CORS96) (EPOCH:2010).

Drive a standard rebar, flush with the ground, mkd.



2017

From this point, the 1/4 sec. cor. of secs. 13 and 18, bears N. 16°02' E., 1,580.24 ft. dist., hereinbefore described.

Dependent Resurvey of Portions of Various Parcels T. 5 S., Rs. 21 and 22 W., Gila and Salt River Meridian, Arizona

FEET

From this same point, a cor. of Lot 11, identical with a cor. of Lot 11A-3, Martinez Lake, bears N. 18°50' E., 205.04 ft. dist., monumented with a rebar, 5/8 in. diam., firmly set, flush with the ground, with a plastic cap mkd. DAVEY LS30348, reestablished by James V. Davey, Arizona R.L.S. No. 30348, in 2014, according to the plat filed in Book 13, Page 33, at the Yuma County Recorder's office, dated July 10, 2014.

Angle Point No. 13 falls on the bank of Martinez Lake just inside the edge of brush-line. This point is currently above the waterline, but depending on the fluctuation of the level of the lake it may at times be under water.

GENERAL DESCRIPTION

The purpose of this survey is to define portions of the boundaries of the Martinez Lake Recreation Area, cooperatively managed by the Marine Corps Air Station Yuma and Bureau of Land Management, along with portions of certain Metes-and-Bounds surveys.

This survey is located on Martinez Lake, approximately 23 miles northeasterly of Yuma, Arizona. Access is by way of Highway 95, to Martinez Lake Road, a paved road, to Wildlife Refuge Road, a dirt road, and then to the job site.

The terrain is open and level on top, with brush along the shoreline. The elevation is between 180 to 200 ft. above sea level.

The mean magnetic declination of 11° E. was derived from the United States Geological Survey computer program GEOMAG, utilizing the World Magnetic Model for Epoch 2015 for the dates of the survey.

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FIELD ASSISTANTS

NAMES	CAPACITY		
Charles E. Besancon III	Surveying Technician		
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CERTIFICATE OF SURVEY

I, Craig S. Dukart, Cadastral Surveyor, HEREBY CERTIFY upon honor, that in pursuance of special instructions bearing date of the 29th day of June 2017, I have dependently resurveyed a portion of the east boundary, T. 5 S., R. 22 W., and portions of Metes-and-Bounds surveys, T. 5 S., Rs. 21 and 22 W., of the Gila and Salt River Meridian, in the State of Arizona, which are represented in the foregoing field notes as having been executed by me and under my direction. Said survey has been made in strict conformity with said special instructions, the Manual of Survey Instructions, (2009), and in the specific manner described in the foregoing field notes.

10/05/17	Cin 15
(Date)	(Cadastral Surveyor)
CERTIF	CICATE OF APPROVAL
	BUREAU OF LAND MANAGEMENT Phoenix, Arizona
boundary, T. 5 S., R. 22 W. T. 5 S., Rs. 21 and 22 W., Gila	dependent resurvey of a portion of the east and portions of Metes-and-Bounds surveys, and Salt River Meridian, in the State of Dukart, Cadastral Surveyor, having been rect, are hereby approved. (Chief Cadastral Surveyor of Arizona)
CERTIFI	CATE OF TRANSCRIPT
	canscript of the field notes of the above- 21 and 22 W., Gila and Salt River Meridian, iginal field notes.

(Chief Cadastral Surveyor of Arizona)